



## Newport Chemical Agent Disposal Facility: Accelerated Disposal

After the Sept. 11, 2001, terrorist attacks, the U.S. Army began evaluating additional methods to reduce the public risk associated with chemical stockpile storage, including methods to accelerate stockpile destruction.

In May 2002, the Army announced plans to accelerate destruction of the nerve agent VX stockpile located at Newport Chemical Depot in Indiana, recognizing that complete destruction of the stockpile offers the best security and permanent protection to the public. The Army worked closely with officials and regulators from the Indiana Department of Environmental Management and the U.S. Environmental Protection Agency to determine the most effective way to safely accelerate nerve agent destruction. The resulting plan was approved by environmental regulators, endorsed by federal and state officials and briefed to the Indiana Citizen's Advisory Commission.

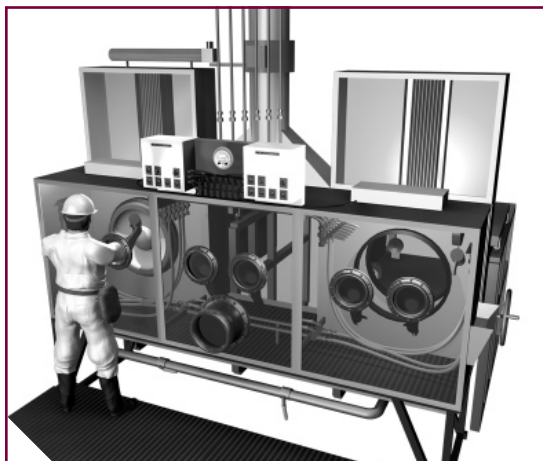
On May 11, 2002, Under Secretary of Defense for Acquisition, Technology and Logistics E.C. "Pete" Aldridge signed the acquisition decision memorandum, giving the Army authority to begin the accelerated disposal project.

### General Process Comparison.

Accelerating stockpile destruction involves the same neutralization technology and much of the same equipment approved for use in the original Newport Chemical Agent Disposal Facility. The accelerated plan simplifies the original process and reorders its sequence to destroy all of the nerve agent first, thereby eliminating the risk presented by the presence of the stockpile up to two years earlier than previously scheduled.

The accelerated process differs from the original process in four main steps: draining agent from storage containers; neutralizing agent and testing to ensure complete destruction; disposing of the neutralization byproduct or "hydrolysate;" and decontaminating of disposal container.

**Step 1: Draining the Agent.** Workers drain the nerve agent from the steel containers using the chemical agent transfer system, a specially



designed sealed glove box system that has been safely used by the Army and the chemical industry for more than 40 years. A tube is inserted into the container and the agent is pumped to an agent holding tank.

### Step 2: Agent Destruction and

**Confirmation.** The nerve agent is fed into a tank where it is neutralized using hot sodium hydroxide, forming a liquid byproduct called hydrolysate. The hydrolysate, is similar in characteristics to commercial household drain cleaners, then is tested to confirm complete agent destruction.

**Step 3: Hydrolysate Disposal.** Hydrolysate is transported off-site by licensed tanker truck to a commercial treatment and disposal facility for bio-treatment.

### Step 4: Container Decontamination and Disposal.

Under the original disposal plan, the steel containers would have been cut, rinsed and decontaminated right after draining the agent. The accelerated process calls for draining and neutralizing the agent, while concurrently decontaminating the interior of the empty containers. These containers will be stored temporarily until all the nerve

For more information,  
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Public Outreach and  
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1(800) 488-0648 or  
[www.cma.army.mil](http://www.cma.army.mil)

or visit the  
Newport Chemical  
Stockpile  
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P.O. Box 279  
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Newport, Indiana 47966  
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## Newport Chemical Agent Disposal Facility: Accelerated Disposal (continued)

agent VX is destroyed, and then cut open and monitored prior to shipment to an off-site facility for thermal cleaning. This approach provides the most immediate protection to the public by destroying the nerve agent contents of the containers first, and then thoroughly decontaminating all of the containers after the nerve agent is neutralized. The container parts will be monitored to ensure that no agent remains and will be shipped off-site for recycling.

Many authorities with extensive knowledge of the chemical demilitarization program, hazardous waste disposal, worker safety regulations and environmental protection

continue to work closely with the Army to ensure that worker and public safety and environmental protection are the most important elements of this project.

If you would like more information on the accelerated nerve agent disposal project at Newport Chemical Depot, contact the staff at the Newport Chemical Stockpile Outreach Office at (765) 492-4445, the NECDF Public Affairs Specialist at (765) 245-4475 or Parson's Public Outreach Manager at (765) 492-4481. You also may visit the Army's Web site at [www.cma.army.mil](http://www.cma.army.mil).

